

6HS8

Sharp-Cutoff Twin Pentode

With Common Cathode, Grid No.1, & Grid No.2

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC). 6.3 ± 0.6 volts

Current at heater volts = 6.3 0.300 amp

Peak heater-cathode voltage:

Heater negative with

respect to cathode. 200 max. volts

Heater positive with

respect to cathode. 200^a max. volts

Direct Interelectrode Capacitances:^b

Grid No.3 to plate (Each unit). 2.0 pf

Grid No.1 to all other electrodes 6.0 pf

Grid No.3 (Each unit) to all other electrodes. 3.6 pf

Plate (Each unit) to all other electrodes. 3.0 pf

Grid No.3 (Unit No.1) to grid No.3 (Unit No.2) 0.015 max. pf

Characteristics, Class A₁ Amplifier:

With one unit operating and plate and grid No.3 of other unit connected to ground

Plate Voltage 100 100 volts

Grid-No.3 Voltage 0 0 volts

Grid-No.2 Voltage 67.5 67.5 volts

Grid-No.1 Voltage 0 ^c volts

Grid-No.3-to-Plate Transconductance — 450 μ mhos

Grid-No.1-to-Plate Transconductance 1100 — μ mhos

Plate Current — 2 ma

Grid-No.3 Voltage (Approx.) for plate μ a = 100. — -3.5 volts ←

Grid-No.1 Voltage (Approx.) for plate μ a = 100. — -2.3 volts

With both units operating

Plate Voltage (Each unit) 100 100 volts

Grid-No.3 Voltage (Each unit) -10 0 volts

Grid-No.2 Voltage 67.5 67.5 volts

Grid-No.1 Voltage ^c ^c volts

Plate Current (Each unit) — 2 ma

Grid-No.2 Current 7 4.4 ma

Cathode Current 7.1 8.5 ma

← Indicates a change.



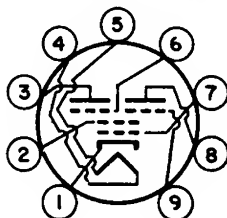
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DATA 1
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Mechanical:

Operating Position.	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length.	2-5/8"
Maximum Seated Length.	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" $\pm$ 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC No.E9-1)
→ Basing Designation for BOTTOM VIEW,	9FG
Pin 1 -Cathode	
Pin 2 -Grid No.2, Internal Shield	
Pin 3 -Plate of Unit No.2	
Pin 4 -Heater	
Pin 5- Heater	
	Pin 6 -Grid No.3 of Unit No.2
	Pin 7 -Grid No.1
	Pin 8 -Plate of Unit No.1
	Pin 9 -Grid No.3 of Unit No.1



AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE (Each unit)	300 max.	volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE (Each unit):		
Peak positive value	50 max.	volts
DC negative value	50 max.	volts
DC positive value	3 max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE	150 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative-bias value	50 max.	volts
CATHODE CURRENT	12 max.	ma
GRID-No.2 INPUT	0.75 max.	watt
PLATE DISSIPATION (Each unit)	1.1 max.	watts

Maximum Circuit Values:

Grid-No.3-Circuit Resistance (Each unit).	0.5 max.	megohm
Grid-No.1-Circuit Resistance.	0.5 max.	megohm

^a The dc component must not exceed 100 volts.

^b without external shield.

^c Adjusted to give a dc grid-No.1 current of 100 microamperes.

→ Indicates a change.

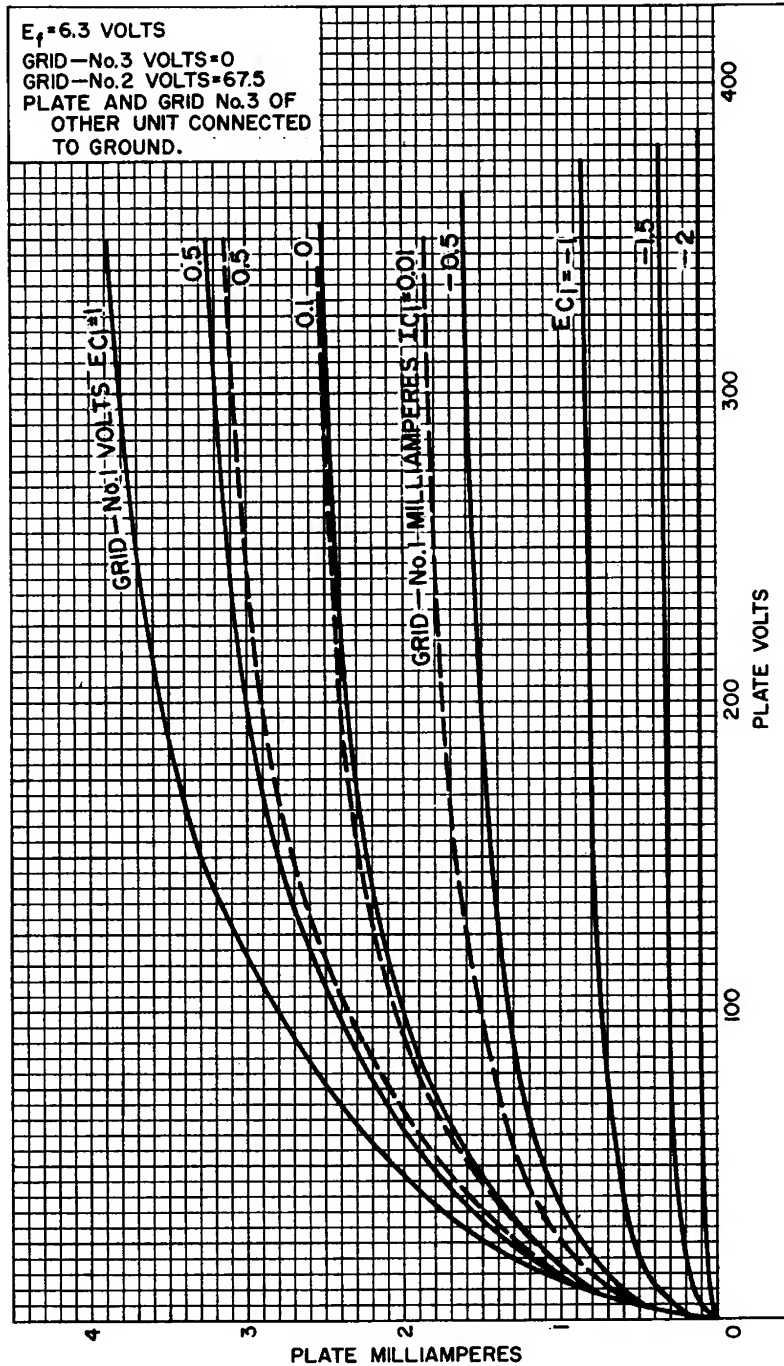
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AVERAGE PLATE CHARACTERISTICS Each Unit



92CM-11099

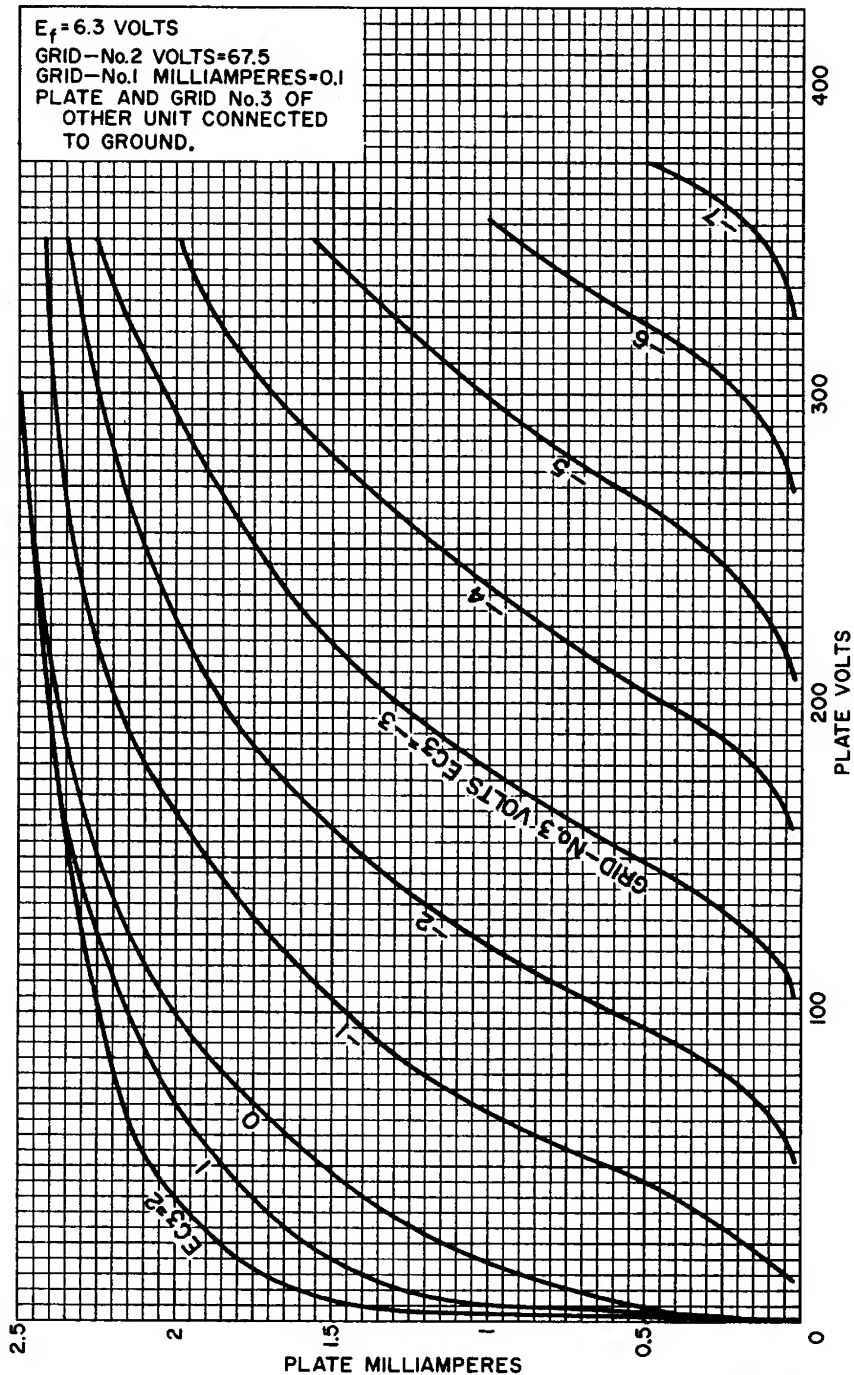


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AVERAGE PLATE CHARACTERISTICS Each Unit



92CM-11102

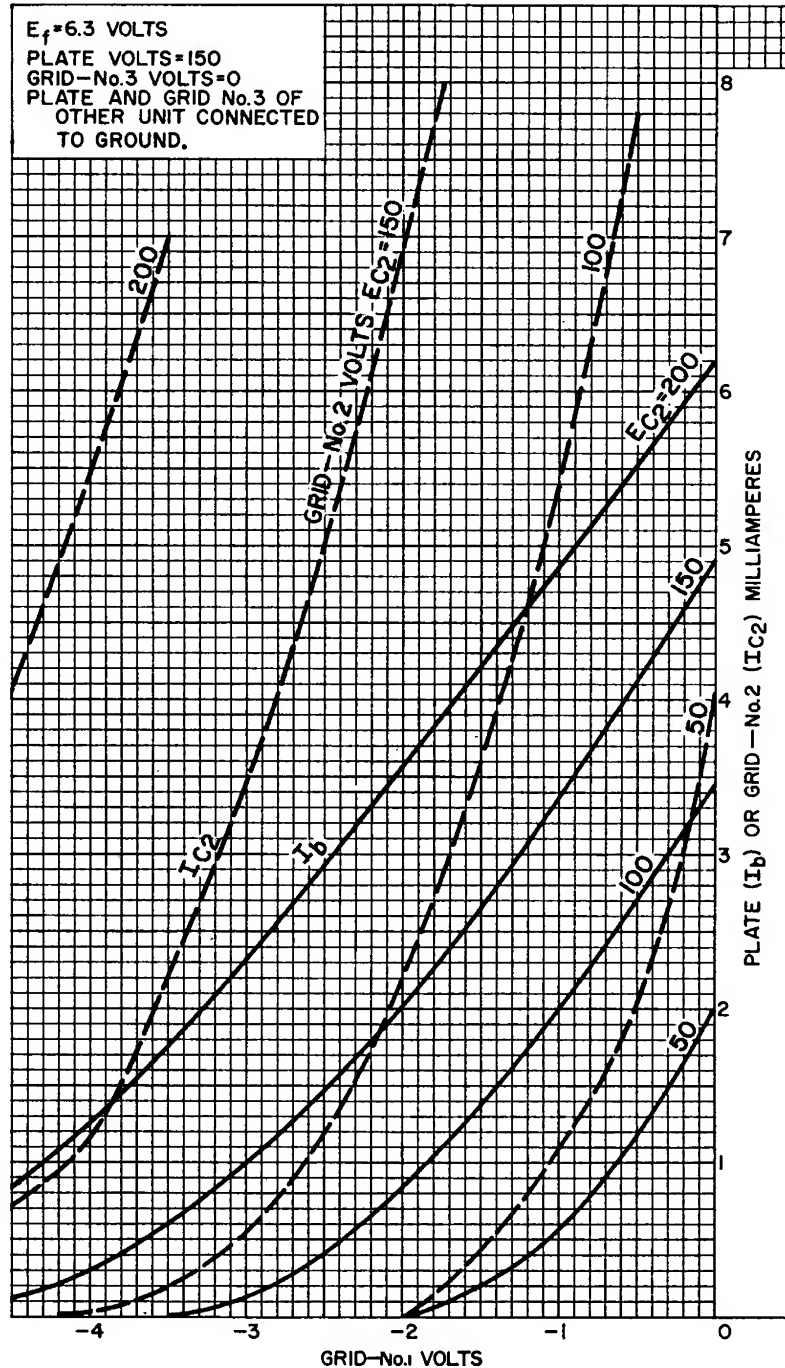
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AVERAGE CHARACTERISTICS Each Unit



92CM-11104

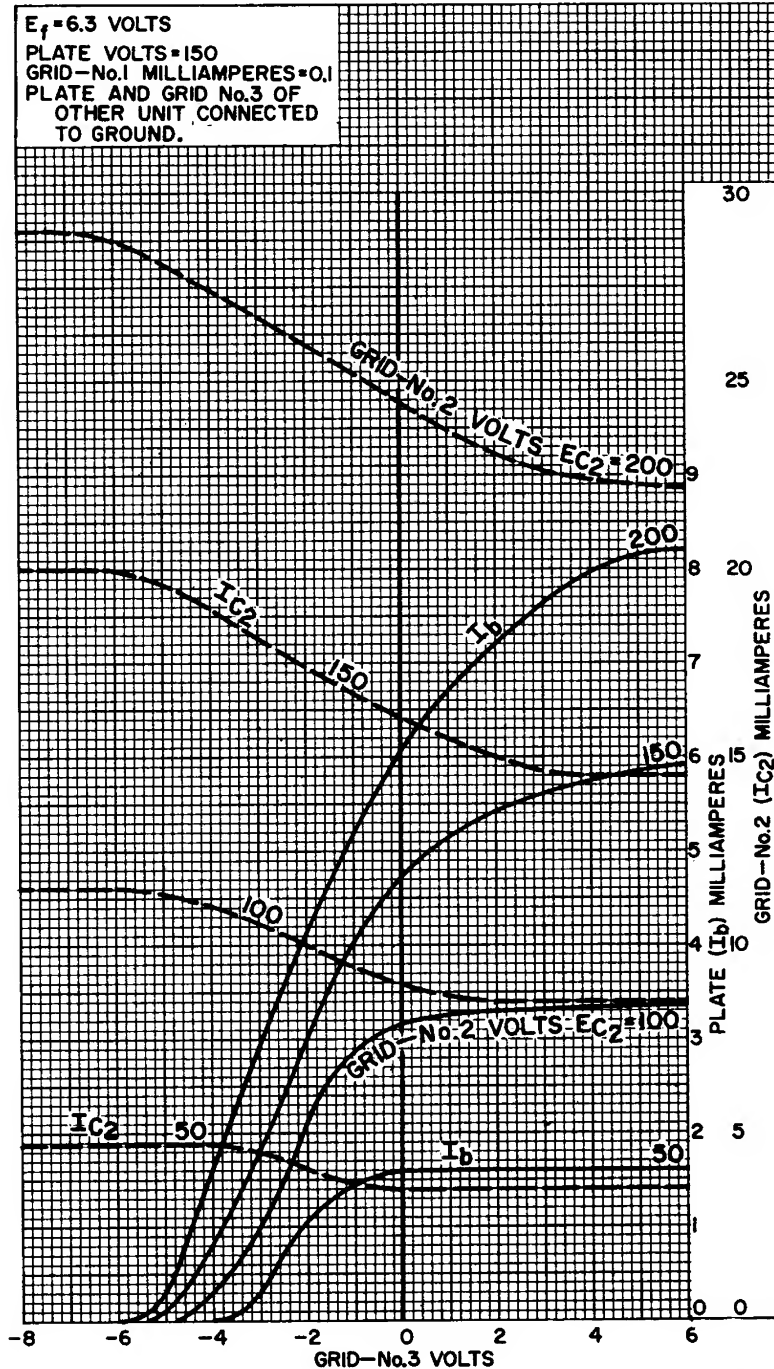


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DATA 3
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AVERAGE CHARACTERISTICS Each Unit



92CM-11105

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